REMARKS

In the October 5, 2005 Office Action, the Examiner:

- Rejected claims 1, 2, 4-6, 8, 9, 13-15 and 17-19 under 35 U.S.C. 103(a) as unpatentable over Chan *et al.* ("*Chan*", U.S. Pat. No. 5,801,866) in view of King *et al.* ("*King*", U.S. Pat. No. 5,812,572);
- Rejected claim 3 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claims 1 and 2, and further in view of Jau *et al.* ("*Jau*", U.S. Pat. No. 6,205,505);
- Rejected claims 7, 11 and 16 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claim 1, and further in view of Traa ("*Traa*", U.S. Pat. No. 6,222,660);
- Rejected claim 10 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claim 1, and further in view of *Traa* and Giebel *et al.* ("*Giebel*", U.S. Pat. No. 5,926,303);
- Rejected claim 20 under 35 U.S.C. 103(a) as unpatentable over Kollanyi *et al.* ("*Kollanyi*", U.S. Pat. No. 4,809,286) in view of *King*;
- Rejected claim 21 under 35 U.S.C. 103(a) as unpatentable over *Kollanyi* in view of *King* as applied to claim 20, and further in view of *Traa*;
- Rejected claim 22 under 35 U.S.C. 103(a) as unpatentable over *Kollanyi* in view of *King* as applied to claim 20, and further in view of Thorton ("*Thorton*", U.S. Pat. App. No. 2004/0202210 A1); and
- Allowed claim 23.

Applicants have amended claims 1, 4 and 20. Applicants retain the remainder of the claims in their current form and respectfully present arguments for their allowability.

Claim Rejections - 35 U.S.C. § 103

The Examiner has:

rejected claims 1, 2, 4-6, 8, 9, 13-15 and 17-19 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King*;

rejected claim 3 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claims 1 and 2, and further in view of *Jau*;

rejected claims 7, 11 and 16 3 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claim 1, and further in view of *Traa*;

rejected claim 10 under 35 U.S.C. 103(a) as unpatentable over *Chan* in view of *King* as applied to claim 1, and further in view of *Traa* and *Giebel*;

rejected claim 20 under 35 U.S.C. 103(a) as unpatentable over *Kollanyi* in view of *King*;

rejected claim 21 under 35 U.S.C. 103(a) as unpatentable over *Kollanyi* in view of *King* as applied to claim 20, and further in view of *Traa*; and

rejected claim 22 under 35 U.S.C. 103(a) as unpatentable over *Kollanyi* in view of *King* as applied to claim 20, and further in view of *Thorton.*

The rejected claims contain three independent claims, namely claims 1, 20 and 23.

With regard to independent claim 1, Applicants have amended this claim to better clarify the term "digital diagnostic data." The digital diagnostic data corresponds to operating conditions of the optoelectronic transceiver, including data selected from a group consisting of: a loss of received power (RxLOS) signal, a photodiode monitor signal, a power supply voltage (Vcc), an internal temperature, a direct current (DC) bias current, a DC bias power, a transmitter current, a transmitter power, a receiver current, a receiver power, a Thermoelectric Cooler (TEC) temperature, and a TEC load. Support for these amendments can be found, for example, in paragraphs 48, 68 and 77. No new matter has been added.

Chan discloses only two types of data, namely "Leica data" and "GPS data." Leica data is directional data from the LEICA VECTOR direction indicating binocular 101 supplied by Leica Technologies, Inc. *See* col. 3, ll. 22-25 and col. 5, ll. 1-3. GPS data is Global Positioning System data that indicates a global position of an operator of the device. Neither Leica data nor GPS data can be likened to the digital diagnostic data of independent claim 1, as such data does not correspond to operating conditions of an optoelectronic transceiver.

King discloses storing data during calibration only, and, therefore, does not disclose storing digital diagnostic data that corresponds to the operating conditions of the optoelectronic transceiver, as required by independent claim 1. For example, *King* states in the Abstract:

> During calibration procedures for the modules, a laser diode is characterized over a defined operating temperature range. Characteristic data and/or curves defining the operational characteristics of the laser diode over the range of operating conditions (temperature, power supply) are stored in non-volatile memory such as EEPROM. During operation, an embedded microcontroller . . . dynamically control the operational parameters . . . based on the current operating conditions . . . The operating conditions are used as an index into the non-volatile memory containing operational data tables as well as predicted "end-of-life" data.

(Emphasis added).

In other words, *King* teaches storing data in memory only during calibration, and, as such, does not teach storing digital diagnostic data that corresponds to the operating conditions of the optoelectronic transceiver, as required by independent claim 1.

Accordingly, for this reason alone, it is respectfully submitted that independent claim 1, and its dependent claims 2-19, cannot be unpatentable over the combination of *King* and *Chan*, as these references alone or in combination do not disclose, teach or suggest a memory configured to store digital diagnostic data corresponding to operating conditions of the optoelectronic transceiver.

With regard to claim 20, the Examiner states that *Kollanyi* discloses:

> a second controller IC (data driver 180) electrically coupled to the laser driver to supply an alternating current (AC) current control signal to the laser driver causing the laser driver to supply AC current to the optoelectronic transmitter (column 4, lines 17-24).. . . circuits for providing control signals related to DC bias current and AC modulation current, respectively, to the laser driver, but they do not specifically disclose that the DC bias current has a predetermined level determined by the DC bias current control signal or that the AC current has a predetermined level determined by the AC current control signal

Independent claim 20 has been amended to clarify that the second controller IC is configured to supply an alternating current (AC) current control signal to the laser driver causing the laser driver to supply modulation current having a modulation level determined by the AC current control signal to the optoelectronic transmitter. Support for these amendments can be found, for example, in paragraphs 45 and 63. No new matter has been added.

Kollanyi, however, only discloses a single controller, namely "laser DC Bias Control" 150. The "Data Driver" 180 relied upon by the Examiner for the second controller IC of claim 1, is not a controller at all, much less a controller that supplies an alternating current (AC) control signal to the laser driver that causes the laser driver to supply modulation current having a modulation level to the optoelectronic transmitter. The only disclosed function performed by the data driver 180 is that "[t]he Data Driver reclocks the data transmitted from ESP 200 using the XMT, CLOCK signal." *See* col. 3, ll. 36-39. Accordingly, for this reason alone, *Kollanyi* does not disclose, teach or suggest a second controller that supplies an AC control signal to control the modulation level. Furthermore, *Kollanyi* does not require a modulation level to be set at all, as the AC modulation signal

effectively turns the laser on and off, i.e., the laser does not modulate around an unmodulated level. *See* col. 4, ll. 24 and 43, and claim 1.

Accordingly, it is respectfully submitted that independent claim 20, and its dependent claims 21-22, cannot be unpatentable over the combination of *King* and *Kollanyi*, as these references alone or in combination do not disclose, teach or suggest a memory configured to store digital diagnostic data corresponding to operating conditions of the optoelectronic transceiver.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is now in a condition for allowance. However, should the Examiner believe that the claims are not in condition for allowance, the Applicant encourages the Examiner to call the undersigned attorney at 650-843-7519 to set up an interview.

If there are any fees or credits due in connection with the filing of this Amendment, including any fees required for an Extension of Time under 37 C.F.R. Section 1.136, authorization is given to charge any necessary fees to our Deposit Account No. 50-0310 (order No. 060900-0157-US). A copy of this sheet is enclosed for such purpose.

Respectfully submitted,

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